

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville

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Nashville, TN 37204

Tel: (615)726-0177

TestAmerica Job ID: 490-6546-1

Client Project/Site: NPDES Permit MA 0000833

For:

Exxon Global Remed. Grp

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Everett, Massachusetts 02149

Attn: Mr. Ernest E Haynes

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Authorized for release by:

9/24/2012 4:59:25 PM

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Sample Summary

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-6546-1	Outfall 001 C	Water	09/13/12 10:30	09/14/12 08:30
490-6546-2	Trip Blank	Water	09/13/12 00:01	09/14/12 08:30

Case Narrative

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

Job ID: 490-6546-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-6546-1

Comments

No additional comments.

Receipt

The samples were received on 9/14/2012 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8° C.

HPLC

No analytical or quality issues were noted.

GC VOA

Method(s) 602: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 20708. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

Method(s) 602: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 21204.

No other analytical or quality issues were noted.

General Chemistry

Method(s) 1677: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: (180-14521-1), (180-14521-1 MS), (180-14521-1 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 1677: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 49120 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F	MS or MSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

Client Sample ID: Outfall 001 C

Lab Sample ID: 490-6546-1

Date Collected: 09/13/12 10:30

Matrix: Water

Date Received: 09/14/12 08:30

Method: 602 - Purgeable Aromatics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.360		1.00	0.360	ug/L			09/18/12 00:57	1
Toluene	<0.330		1.00	0.330	ug/L			09/18/12 00:57	1
Ethylbenzene	<0.370		1.00	0.370	ug/L			09/18/12 00:57	1
Xylenes, Total	<0.600		3.00	0.600	ug/L			09/18/12 00:57	1
Methyl tert-butyl ether	0.674	J	1.00	0.460	ug/L			09/18/12 00:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>a,a,a</i> -Trifluorotoluene	88		50 - 150		09/18/12 00:57	1

Method: 610 - PAHs (HPLC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.162		0.952	0.162	ug/L		09/19/12 13:13	09/22/12 01:37	1
Acenaphthylene	<0.219		0.952	0.219	ug/L		09/19/12 13:13	09/22/12 01:37	1
Anthracene	<0.0952		0.952	0.0952	ug/L		09/19/12 13:13	09/22/12 01:37	1
Benzo[a]anthracene	<0.0190		0.190	0.0190	ug/L		09/19/12 13:13	09/22/12 01:37	1
Benzo[a]pyrene	<0.0190		0.0952	0.0190	ug/L		09/19/12 13:13	09/22/12 01:37	1
Benzo[b]fluoranthene	<0.0190		0.0952	0.0190	ug/L		09/19/12 13:13	09/22/12 01:37	1
Benzo[g,h,i]perylene	<0.0190		0.190	0.0190	ug/L		09/19/12 13:13	09/22/12 01:37	1
Benzo[k]fluoranthene	<0.0190		0.133	0.0190	ug/L		09/19/12 13:13	09/22/12 01:37	1
Chrysene	<0.0190		0.0952	0.0190	ug/L		09/19/12 13:13	09/22/12 01:37	1
Dibenz(a,h)anthracene	<0.0286		0.190	0.0286	ug/L		09/19/12 13:13	09/22/12 01:37	1
Fluoranthene	<0.0286		0.190	0.0286	ug/L		09/19/12 13:13	09/22/12 01:37	1
Fluorene	<0.0381		0.476	0.0381	ug/L		09/19/12 13:13	09/22/12 01:37	1
Indeno[1,2,3-cd]pyrene	<0.0381		0.190	0.0381	ug/L		09/19/12 13:13	09/22/12 01:37	1
Naphthalene	<0.324		0.952	0.324	ug/L		09/19/12 13:13	09/22/12 01:37	1
Phenanthrene	<0.0476		0.476	0.0476	ug/L		09/19/12 13:13	09/22/12 01:37	1
Pyrene	<0.0286		0.190	0.0286	ug/L		09/19/12 13:13	09/22/12 01:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>p</i> -Terphenyl	57		25 - 135	09/19/12 13:13	09/22/12 01:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	<1.40		4.00	1.40	mg/L		09/18/12 09:40	09/18/12 09:40	1
Available cyanide	0.00300		0.00200	0.000300	mg/L			09/20/12 13:37	1

Client Sample Results

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-6546-2

Date Collected: 09/13/12 00:01

Matrix: Water

Date Received: 09/14/12 08:30

Method: 602 - Purgeable Aromatics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.360		1.00	0.360	ug/L			09/19/12 22:01	1
Toluene	<0.330		1.00	0.330	ug/L			09/19/12 22:01	1
Ethylbenzene	<0.370		1.00	0.370	ug/L			09/19/12 22:01	1
Xylenes, Total	<0.600		3.00	0.600	ug/L			09/19/12 22:01	1
Methyl tert-butyl ether	<0.460		1.00	0.460	ug/L			09/19/12 22:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		50 - 150		09/19/12 22:01	1

QC Sample Results

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

Method: 602 - Purgeable Aromatics (GC)

Lab Sample ID: MB 490-20708/6

Matrix: Water

Analysis Batch: 20708

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.360		1.00	0.360	ug/L			09/17/12 22:57	1
Toluene	<0.330		1.00	0.330	ug/L			09/17/12 22:57	1
Ethylbenzene	<0.370		1.00	0.370	ug/L			09/17/12 22:57	1
Xylenes, Total	<0.600		3.00	0.600	ug/L			09/17/12 22:57	1
Methyl tert-butyl ether	<0.460		1.00	0.460	ug/L			09/17/12 22:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		50 - 150		09/17/12 22:57	1

Lab Sample ID: LCS 490-20708/19

Matrix: Water

Analysis Batch: 20708

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	20.34		ug/L		102	39 - 150
Toluene	20.0	21.34		ug/L		107	46 - 148
Ethylbenzene	20.0	20.54		ug/L		103	32 - 160
Methyl tert-butyl ether	20.0	18.33		ug/L		92	56 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	110		50 - 150

Lab Sample ID: LCSD 490-20708/35

Matrix: Water

Analysis Batch: 20708

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	20.0	17.92		ug/L		90	39 - 150	13	
Toluene	20.0	18.05		ug/L		90	46 - 148	17	
Ethylbenzene	20.0	18.06		ug/L		90	32 - 160	13	
Methyl tert-butyl ether	20.0	16.13		ug/L		81	56 - 136	13	

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	97		50 - 150

Lab Sample ID: LCS 490-21204/19

Matrix: Water

Analysis Batch: 21204

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	16.80		ug/L		84	39 - 150
Toluene	20.0	17.48		ug/L		87	46 - 148
Ethylbenzene	20.0	16.94		ug/L		85	32 - 160
Methyl tert-butyl ether	20.0	14.92		ug/L		75	56 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	108		50 - 150

QC Sample Results

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

Method: 610 - PAHs (HPLC)

Lab Sample ID: MB 490-21300/1-A

Matrix: Water

Analysis Batch: 22333

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 21300

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.170		1.00	0.170	ug/L		09/19/12 13:13	09/21/12 21:48	1
Acenaphthylene	0.6815	J	1.00	0.230	ug/L		09/19/12 13:13	09/21/12 21:48	1
Anthracene	<0.100		1.00	0.100	ug/L		09/19/12 13:13	09/21/12 21:48	1
Benzo[a]anthracene	<0.0200		0.200	0.0200	ug/L		09/19/12 13:13	09/21/12 21:48	1
Benzo[a]pyrene	<0.0200		0.100	0.0200	ug/L		09/19/12 13:13	09/21/12 21:48	1
Benzo[b]fluoranthene	<0.0200		0.100	0.0200	ug/L		09/19/12 13:13	09/21/12 21:48	1
Benzo[g,h,i]perylene	<0.0200		0.200	0.0200	ug/L		09/19/12 13:13	09/21/12 21:48	1
Benzo[k]fluoranthene	<0.0200		0.140	0.0200	ug/L		09/19/12 13:13	09/21/12 21:48	1
Chrysene	<0.0200		0.100	0.0200	ug/L		09/19/12 13:13	09/21/12 21:48	1
Dibenz(a,h)anthracene	<0.0300		0.200	0.0300	ug/L		09/19/12 13:13	09/21/12 21:48	1
Fluoranthene	<0.0300		0.200	0.0300	ug/L		09/19/12 13:13	09/21/12 21:48	1
Fluorene	<0.0400		0.500	0.0400	ug/L		09/19/12 13:13	09/21/12 21:48	1
Indeno[1,2,3-cd]pyrene	<0.0400		0.200	0.0400	ug/L		09/19/12 13:13	09/21/12 21:48	1
Naphthalene	<0.340		1.00	0.340	ug/L		09/19/12 13:13	09/21/12 21:48	1
Phenanthrene	<0.0500		0.500	0.0500	ug/L		09/19/12 13:13	09/21/12 21:48	1
Pyrene	<0.0300		0.200	0.0300	ug/L		09/19/12 13:13	09/21/12 21:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl	66		25 - 135	09/19/12 13:13	09/21/12 21:48	1

Lab Sample ID: LCS 490-21300/2-A

Matrix: Water

Analysis Batch: 22333

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 21300

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	2.50	1.669		ug/L		67	1 - 124
Acenaphthylene	5.00	3.379		ug/L		68	1 - 139
Anthracene	2.50	1.900		ug/L		76	1 - 126
Benzo[a]anthracene	2.50	1.870		ug/L		75	12 - 135
Benzo[a]pyrene	2.50	1.811		ug/L		72	1 - 128
Benzo[b]fluoranthene	2.50	1.854		ug/L		74	6 - 150
Benzo[g,h,i]perylene	2.50	1.618		ug/L		65	1 - 116
Benzo[k]fluoranthene	2.50	1.843		ug/L		74	1 - 159
Chrysene	2.50	1.879		ug/L		75	1 - 199
Dibenz(a,h)anthracene	2.50	1.446		ug/L		58	1 - 110
Fluoranthene	2.50	1.866		ug/L		75	14 - 123
Fluorene	2.50	1.680		ug/L		67	1 - 142
Indeno[1,2,3-cd]pyrene	2.50	1.746		ug/L		70	1 - 116
Naphthalene	2.50	1.476		ug/L		59	1 - 122
Phenanthrene	2.50	1.795		ug/L		72	1 - 155
Pyrene	2.50	1.867		ug/L		75	1 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl	72		25 - 135

QC Sample Results

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

Method: 610 - PAHs (HPLC) (Continued)

Lab Sample ID: LCSD 490-21300/3-A

Matrix: Water

Analysis Batch: 22333

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 21300

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	2.50	1.936		ug/L		77	1 - 124	15	50
Acenaphthylene	5.00	3.884		ug/L		78	1 - 139	14	50
Anthracene	2.50	2.187		ug/L		87	1 - 126	14	50
Benzo[a]anthracene	2.50	2.170		ug/L		87	12 - 135	15	50
Benzo[a]pyrene	2.50	2.123		ug/L		85	1 - 128	16	50
Benzo[b]fluoranthene	2.50	2.162		ug/L		86	6 - 150	15	50
Benzo[g,h,i]perylene	2.50	1.965		ug/L		79	1 - 116	19	50
Benzo[k]fluoranthene	2.50	2.142		ug/L		86	1 - 159	15	50
Chrysene	2.50	2.162		ug/L		86	1 - 199	14	50
Dibenz(a,h)anthracene	2.50	1.745		ug/L		70	1 - 110	19	50
Fluoranthene	2.50	2.122		ug/L		85	14 - 123	13	50
Fluorene	2.50	1.940		ug/L		78	1 - 142	14	50
Indeno[1,2,3-cd]pyrene	2.50	2.108		ug/L		84	1 - 116	19	50
Naphthalene	2.50	1.737		ug/L		69	1 - 122	16	50
Phenanthrene	2.50	2.072		ug/L		83	1 - 155	14	50
Pyrene	2.50	2.122		ug/L		85	1 - 140	13	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
p-Terphenyl	82		25 - 135

Lab Sample ID: 180-14438-B-1-A MS

Matrix: Water

Analysis Batch: 22333

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 21300

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.478		2.50	1.900		ug/L		76	1 - 124
Acenaphthylene	<0.230		5.00	3.367		ug/L		67	1 - 139
Anthracene	<0.100		2.50	1.977		ug/L		79	1 - 126
Benzo[a]anthracene	0.0836	J	2.50	1.752		ug/L		67	12 - 135
Benzo[a]pyrene	0.301		2.50	1.645		ug/L		56	1 - 128
Benzo[b]fluoranthene	0.215		2.50	1.686		ug/L		59	6 - 150
Benzo[g,h,i]perylene	0.205		2.50	1.458		ug/L		50	1 - 116
Benzo[k]fluoranthene	0.182		2.50	1.542		ug/L		54	1 - 159
Chrysene	<0.0200		2.50	1.790		ug/L		72	1 - 199
Dibenz(a,h)anthracene	<0.0300		2.50	1.202		ug/L		48	1 - 110
Fluoranthene	<0.0300		2.50	1.873		ug/L		75	14 - 123
Fluorene	<0.0400		2.50	1.735		ug/L		69	1 - 142
Indeno[1,2,3-cd]pyrene	0.199		2.50	1.373		ug/L		47	1 - 116
Naphthalene	<0.340		2.50	1.798		ug/L		72	1 - 122
Phenanthrene	<0.0500		2.50	1.866		ug/L		52	1 - 155
Pyrene	<0.0300		2.50	1.957		ug/L		78	1 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
p-Terphenyl	67		25 - 135

QC Sample Results

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 490-20832/1-A

Matrix: Water

Analysis Batch: 20885

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 20832

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease (HEM)	<1.40		4.00	1.40	mg/L		09/18/12 09:40	09/18/12 09:40	1

Lab Sample ID: LCS 490-20832/2-A

Matrix: Water

Analysis Batch: 20885

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 20832

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease (HEM)	41.7	35.31		mg/L		85	78 - 114

Lab Sample ID: LCSD 490-20832/3-A

Matrix: Water

Analysis Batch: 20885

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 20832

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Oil & Grease (HEM)	41.7	36.46		mg/L		87	78 - 114	3	18

Lab Sample ID: 490-6587-L-1-A MS

Matrix: Water

Analysis Batch: 20885

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 20832

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease (HEM)	<1.40		41.7	34.27		mg/L		82	78 - 114

Method: 1677 - Cyanide, Available (Flow Injection)

Lab Sample ID: MB 180-49120/17

Matrix: Water

Analysis Batch: 49120

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Available cyanide	<0.000300		0.00200	0.000300	mg/L			09/20/12 13:34	1

Lab Sample ID: LCS 180-49120/16

Matrix: Water

Analysis Batch: 49120

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Available cyanide	0.100	0.09800		mg/L		98	82 - 132

Lab Sample ID: 180-14521-A-1 MS

Matrix: Water

Analysis Batch: 49120

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Available cyanide	0.468		1.00	1.095	F	mg/L		63	82 - 130

QC Sample Results

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

Method: 1677 - Cyanide, Available (Flow Injection) (Continued)

Lab Sample ID: 180-14521-A-1 MSD

Matrix: Water

Analysis Batch: 49120

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Available cyanide	0.468		1.00	1.094	F	mg/L		63	82 - 130	0	11

QC Association Summary

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

GC VOA

Analysis Batch: 20708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-6546-1	Outfall 001 C	Total/NA	Water	602	
LCS 490-20708/19	Lab Control Sample	Total/NA	Water	602	
LCSD 490-20708/35	Lab Control Sample Dup	Total/NA	Water	602	
MB 490-20708/6	Method Blank	Total/NA	Water	602	

Analysis Batch: 21204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-6546-2	Trip Blank	Total/NA	Water	602	
LCS 490-21204/19	Lab Control Sample	Total/NA	Water	602	

HPLC/IC

Prep Batch: 21300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-14438-B-1-A MS	Matrix Spike	Total/NA	Water	610	
490-6546-1	Outfall 001 C	Total/NA	Water	610	
LCS 490-21300/2-A	Lab Control Sample	Total/NA	Water	610	
LCSD 490-21300/3-A	Lab Control Sample Dup	Total/NA	Water	610	
MB 490-21300/1-A	Method Blank	Total/NA	Water	610	

Analysis Batch: 22333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-14438-B-1-A MS	Matrix Spike	Total/NA	Water	610	21300
490-6546-1	Outfall 001 C	Total/NA	Water	610	21300
LCS 490-21300/2-A	Lab Control Sample	Total/NA	Water	610	21300
LCSD 490-21300/3-A	Lab Control Sample Dup	Total/NA	Water	610	21300
MB 490-21300/1-A	Method Blank	Total/NA	Water	610	21300

General Chemistry

Prep Batch: 20832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-6546-1	Outfall 001 C	Total/NA	Water	1664A	
490-6587-L-1-A MS	Matrix Spike	Total/NA	Water	1664A	
LCS 490-20832/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 490-20832/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	
MB 490-20832/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 20885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-6546-1	Outfall 001 C	Total/NA	Water	1664A	20832
490-6587-L-1-A MS	Matrix Spike	Total/NA	Water	1664A	20832
LCS 490-20832/2-A	Lab Control Sample	Total/NA	Water	1664A	20832
LCSD 490-20832/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	20832
MB 490-20832/1-A	Method Blank	Total/NA	Water	1664A	20832

Analysis Batch: 49120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-14521-A-1 MS	Matrix Spike	Total/NA	Water	1677	
180-14521-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	1677	
490-6546-1	Outfall 001 C	Total/NA	Water	1677	
LCS 180-49120/16	Lab Control Sample	Total/NA	Water	1677	

QC Association Summary

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

General Chemistry (Continued)

Analysis Batch: 49120 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-49120/17	Method Blank	Total/NA	Water	1677	

Lab Chronicle

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

Client Sample ID: Outfall 001 C

Date Collected: 09/13/12 10:30

Date Received: 09/14/12 08:30

Lab Sample ID: 490-6546-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	602		1	20708	09/18/12 00:57	AC	TAL NSH
Total/NA	Prep	610			21300	09/19/12 13:13	NR	TAL NSH
Total/NA	Analysis	610		1	22333	09/22/12 01:37	HT	TAL NSH
Total/NA	Analysis	1677		1	49120	09/20/12 13:37	PJ	TAL PIT
Total/NA	Analysis	1664A		1	20885	09/18/12 09:40	BD	TAL NSH
Total/NA	Prep	1664A			20832	09/18/12 09:40	BD	TAL NSH

Client Sample ID: Trip Blank

Date Collected: 09/13/12 00:01

Date Received: 09/14/12 08:30

Lab Sample ID: 490-6546-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	602		1	21204	09/19/12 22:01	AC	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Method Summary

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

Method	Method Description	Protocol	Laboratory
602	Purgeable Aromatics (GC)	40CFR136A	TAL NSH
610	PAHs (HPLC)	40CFR136A	TAL NSH
1664A	HEM and SGT-HEM	1664A	TAL NSH
1677	Cyanide, Available (Flow Injection)	EPA	TAL PIT

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Certification Summary

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	ACIL		393	10-30-12
A2LA	ISO/IEC 17025		0453.07	12-31-13
Alabama	State Program	4	41150	05-31-13
Alaska (UST)	State Program	10	UST-087	07-24-13
Arizona	State Program	9	AZ0473	05-05-13
Arkansas DEQ	State Program	6	88-0737	04-25-13
California	NELAC	9	1168CA	10-31-12
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Colorado	State Program	8	N/A	02-28-13
Connecticut	State Program	1	PH-0220	12-31-13
Florida	NELAC	4	E87358	06-30-13
Illinois	NELAC	5	200010	12-09-12
Iowa	State Program	7	131	05-01-14
Kansas	NELAC	7	E-10229	10-31-12
Kentucky	State Program	4	90038	12-31-12
Kentucky (UST)	State Program	4	19	09-15-13
Louisiana	NELAC	6	LA110014	12-31-12
Louisiana	NELAC	6	30613	06-30-13
Maryland	State Program	3	316	03-31-13
Massachusetts	State Program	1	M-TN032	06-30-13
Minnesota	NELAC	5	047-999-345	12-31-12
Mississippi	State Program	4	N/A	06-30-13
Montana (UST)	State Program	8	NA	01-01-15
Nevada	State Program	9	TN00032	09-30-13
New Hampshire	NELAC	1	2963	10-09-12
New Jersey	NELAC	2	TN965	06-30-13
New York	NELAC	2	11342	04-01-13
North Carolina DENR	State Program	4	387	12-31-12
North Dakota	State Program	8	R-146	06-30-13
Ohio VAP	State Program	5	CL0033	01-19-14
Oklahoma	State Program	6	9412	08-31-13
Oregon	NELAC	10	TN200001	04-30-13
Pennsylvania	NELAC	3	68-00585	06-30-13
Rhode Island	State Program	1	LAO00268	12-30-12
South Carolina	State Program	4	84009 (001)	02-28-13
South Carolina	State Program	4	84009 (002)	02-23-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAC	6	T104704077-09-TX	08-31-13
USDA	Federal		S-48469	11-02-13
Utah	NELAC	8	TAN	06-30-13
Virginia	NELAC	3	460152	06-14-13
Washington	State Program	10	C789	07-19-13
West Virginia DEP	State Program	3	219	02-28-13
Wisconsin	State Program	5	998020430	08-31-13
Wyoming (UST)	A2LA	8	453.07	12-31-13

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-13
California	NELAC	9	4224CA	03-31-13
Connecticut	State Program	1	PH-0688	09-30-12

Certification Summary

Client: Exxon Global Remed. Grp
Project/Site: NPDES Permit MA 0000833

TestAmerica Job ID: 490-6546-1

Laboratory: TestAmerica Pittsburgh (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAC	4	E871008	06-30-13
Illinois	NELAC	5	002602	06-30-13
Kansas	NELAC	7	E-10350	01-31-13
L-A-B	DoD ELAP		L2314	02-24-13
Louisiana	NELAC	6	04041	06-30-13
New Hampshire	NELAC	1	203011	04-04-13
New Jersey	NELAC	2	PA005	06-30-13
New York	NELAC	2	11182	04-01-13
North Carolina DENR	State Program	4	434	12-31-12
Pennsylvania	NELAC	3	02-00416	04-30-13
South Carolina	State Program	4	89014	04-30-13
USDA	Federal		P-Soil-01	04-16-15
USDA	Federal		P330-10-00139	04-28-13
Utah	NELAC	8	STLP	04-30-13
Virginia	NELAC	3	460189	09-14-13
West Virginia DEP	State Program	3	142	01-31-13
Wisconsin	State Program	5	998027800	08-31-13

COOLER RECEIPT FORM



Cooler Received/Opened On 9/14/2012 @ 8:30

1. Tracking # 1278 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun ID 95610068

2. Temperature of rep. sample or temp blank when opened: 3.8 Degrees Celsius

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler?

YES NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly?

YES NO...NA

6. Were custody papers inside cooler?

YES NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) [Signature]

7. Were custody seals on containers:

YES NO and Intact

YES...NO NA

Were these signed and dated correctly?

YES...NO NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)?

YES NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)?

YES NO...NA

12. Did all container labels and tags agree with custody papers?

YES NO...NA

13a. Were VOA vials received?

YES NO...NA

b. Was there any observable headspace present in any VOA vial?

YES NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (initial) [Signature]

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES NO...NA

b. Did the bottle labels indicate that the correct preservatives were used

YES NO...NA

16. Was residual chlorine present?

YES NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) [Signature]

17. Were custody papers properly filled out (ink, signed, etc)?

YES NO...NA

18. Did you sign the custody papers in the appropriate place?

YES NO...NA

19. Were correct containers used for the analysis requested?

YES NO...NA

20. Was sufficient amount of sample sent in each container?

YES NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) [Signature]

I certify that I attached a label with the unique LIMS number to each container (initial) [Signature]

21. Were there Non-Conformance issues at login? YES NO Was a PIPE generated? YES NO..#

9/24/2012

Login Sample Receipt Checklist

Client: Exxon Global Remed. Grp

Job Number: 490-6546-1

Login Number: 6546

List Source: TestAmerica Nashville

List Number: 1

Creator: Ford, Easton

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Exxon Global Remed. Grp

Job Number: 490-6546-1

Login Number: 6546

List Number: 1

Creator: Watson, Debbie

List Source: TestAmerica Pittsburgh

List Creation: 09/18/12 02:45 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	